

## CLAIMS

1           1.     A method in a computer system for dispatching requests to perform  
2 services to sub-applications that use different logic models the method comprising:  
3           providing a context for the sub-applications  
4           receiving a request to perform a service; and  
5           for a plurality of sub-applications,  
6           determining whether the received request should be dispatched to the  
7 sub-application; and  
8           when it is determined that the request should be dispatched to the sub-  
9 application, invoking a service routine of the sub-application passing the request  
10          whereby the sub-applications share the provided context.

1           2.     The method of claim 1 wherein the sub-applications are ordered and the  
2 invoking of the service routines is performed in the order of the sub-applications.

1           3.     The method of claim 1 wherein the determining includes determining  
2 whether a match criteria for the sub-application matches the received request.

1           4.     The method of claim 3 wherein the requests are HTTP requests with a  
2 URL and the match criteria is a regular expression relating to the URL.

1           5.     The method of claim 1 including suppressing the invoking of additional  
2 service routines when an invoked service routine returns an indication to suppress the  
3 invoking of additional service routine.

1           6.     The method of claim 1 including suppressing the invoking of additional  
2 service routines when an invoked service routine responds to the received request.

1           7.     The method of claim 1 wherein an invoked service routine performs  
2     user authentication and indicates to suppress invoking of additional service routines when a  
3     user cannot be authenticated.

1           8.     The method of claim 1 wherein an invoked service routine logs the  
2     received request.

1           9.     The method of claim 1 wherein an invoked service routine logs a  
2     response of another invoked service routine.

1           10.    The method of claim 1 wherein an invoked service routine transforms  
2     the received request from one protocol to another protocol.

1           11.    The method of claim 1 including:  
2     for each of a plurality of sub-applications,  
3                 retrieving initialization parameters for the sub-application;  
4                 retrieving an indication of a class for the sub-application; and  
5                 instantiating an instance of the class with the retrieved initialization  
6     parameters.

1           12.    The method of claim 1 wherein the determining includes determining  
2     whether a match criteria in a configuration file for the sub-application matches the received  
3     request.

1           13.    The method of claim 1 wherein the determining is performed by a match  
2     routine of the sub-application.

1           14.    The method of claim 1 wherein a sub-application uses interaction-based  
2     model.

1 15. The method of claim 1 wherein a sub-application uses an action-view  
2 model.

1 16. The method of claim 1 wherein a sub-application uses a workflow-based  
2 model.

1 17. The method of claim 1 wherein the sub-applications form an overall  
2 application and wherein the provided context is an application-level context.

1 18. The method of claim 1 wherein the sub-applications form an overall  
2 application that is web-based.

1 19. The method of claim 1 wherein the request is received from a web-  
2 server environment.

1 20. A computer system for dispatching HTTP requests to sub-applications,  
2 comprising:

3 a configuration file having a class, initialization parameters, and a match  
4 criteria associated with the sub-applications;

5 an initialization component that instantiates an object of the class for each sub-  
6 application in the configuration file, the instantiated object being initialized with the  
7 initialization parameters for the sub-application and being provided with a context object, the  
8 context object being shared by the instantiated objects so that the sub-applications share a  
9 common context; and

10 a dispatcher that receives HTTP requests and, when the received HTTP request  
11 matches a match criteria of a sub-application, invokes a service routine of the instantiated  
12 object of the class associated with the sub-application.

1 21. The computer system of claim 20 wherein the match criteria is a regular  
2 expression relating to a URL of the HTTP request.

1           22. The computer system of claim 20 wherein the configuration file  
2 specifies an ordering of the sub-applications and the dispatcher invokes the service routines  
3 in the specified order.

1           23. The computer system of claim 20 wherein the dispatcher does not  
2 invoke any additional service routines when an invoked service routine returns an indication  
3 to not invoke any additional service routines.

1           24. The computer system of claim 20 wherein the dispatcher does not  
2 invoke any additional service routines when an invoked service routine responds to the  
3 received request.

1           25. The computer system of claim 20 wherein a sub-application is based on  
2 an interaction model.

1           26. The computer system of claim 20 wherein a sub-application is based on  
2 an action-view model.

1           27. The computer system of claim 20 wherein each of the sub-applications  
2 implement the same interface.

1           28. A computer system for processing request messages, comprising:  
2 a plurality of sub-applications forming an application, a sub-application having  
3 a match criteria indicating when the sub-application should process a request and having a  
4 service routine to invoke when the match criteria indicates that the sub-application should  
5 process the request, the sub-applications using disparate logic models;

6 a context for the application that is shared by the sub-applications; and  
7 a dispatcher that receives requests, evaluates the match criteria to identify  
8 which sub-applications should process the requests, and invokes the service routines of the  
9 identified sub-applications wherein an invoked sub-applications use the context.

1           29.    The computer system of claim 28 including an initialization component  
2   that instantiates an object of a specified class for each sub-application.

1           30.    The computer system of claim 29 wherein the initialization component  
2   accesses configuration information that specifies the class of each sub-application and any  
3   initialization parameters for the sub-applications.

1           31.    The computer system of claim 29 including a context object  
2   representing the context and wherein the initialization component provides the context object  
3   to each sub-application.

1           32.    The computer system of claim 28 wherein each service routine is passed  
2   a request parameter and returns a response parameter.

1           33.    The computer system of claim 28 wherein the sub-applications are  
2   ordered and the dispatcher invokes the service routines based on the order of the sub-  
3   applications.

1           34.    The computer system of claim 33 wherein an invoked service routine  
2   indicates that additional service routines should not be invoked to process the received  
3   request.

1           35.    The computer system of claim 33 wherein the dispatcher does not  
2   invoke additional service routines when an invoked service routine responds to a received  
3   request.

1           36.    The computer system of claim 28 wherein the request is an HTTP  
2   request message.

1           37. A computer system for processing request messages, comprising:  
2           a plurality of service means for servicing requests, the service means forming  
3 an application, each service means having a match criteria indicating when the service means  
4 should be invoked, the service means implementing different logic models; and  
5           dispatch means for receiving requests, evaluating match criteria to identify  
6 which service means should be invoked to process the requests, and invoking the identified  
7 service means whereby the service means share a context that is common to the service  
8 means of the application.

1           38. The computer system of claim 37 including an initialization means for  
2 instantiating an object of a specified class for each service routine.

1           39. The computer system of claim 38 wherein the initialization means  
2 accesses configuration information that specifies the class of each service means and any  
3 initialization parameters for the service means.

1           40. The computer system of claim 37 wherein each service means is passed  
2 a request parameter and returns a response parameter.

1           41. The computer system of claim 37 wherein the service means are ordered  
2 and the dispatch means invokes the service means based on their order.

1           42. The computer system of claim 41 wherein an invoked service means  
2 indicates that additional service means should not be invoked to process the received request.

1           43. The computer system of claim 41 wherein the dispatch means does not  
2 invoke additional service means when an invoked service means responds to a received  
3 request.

1           44. A computer-readable medium for controlling a computer system to  
2 dispatch requests to perform services to service routines, by a method comprising:  
3           receiving a request to perform a service; and  
4           for a plurality of service routines,  
5                 retrieving a match criteria for the service routine;  
6                 determining whether the received request matches the retrieved match  
7 criteria;  
8                 when it is determined that the request matches the retrieved match  
9 criteria, invoking the service routine for processing of the received request  
10                 whereby the service routines form an application and share a common  
11 context.

1           45. The computer-readable medium of claim 44 wherein the service routines  
2 are ordered and the invoking is performed in the order of the service routines.

1           46. The computer-readable medium of claim 44 wherein the requests are  
2 HTTP requests with a URL and the match criteria is a regular expression relating to the  
3 URL.

1           47. The computer-readable medium of claim 44 including suppressing the  
2 invoking of additional service routines when an invoked service routine returns an indication  
3 to suppress the invoking of additional service routine.

1           48. The computer-readable medium of claim 44 including suppressing the  
2 invoking of additional service routines when an invoked service routine responds to the  
3 received request.